

CLAIMS

1. A method of detecting an emitter signal using a receiver having a tuning step size, the method comprising acts of:
 - 5 a) creating a first dwell to detect a set of emitters, the first dwell being defined, in part, by a first frequency range having a first minimum frequency and a first maximum frequency;
 - b) determining if the first minimum frequency of the first dwell is an integer multiple of the tuning step size;
 - 10 c) if the first minimum frequency of the first dwell is not an integer multiple of the tuning step size, shifting the first frequency range of the first dwell to generate a second frequency range having a second minimum frequency and a second maximum frequency, such that the second minimum frequency of the first dwell is an integer multiple of the tuning step size; and
 - 15 d) determining if a portion of a third frequency range of an emitter of the set of emitters that is covered by the first frequency range is not covered by the second frequency range.
2. The method of claim 1, further comprising an act of:
 - 20 e) if the portion of the third frequency range is not covered by the second frequency range, creating a second dwell to cover the portion of third frequency range that is not covered by the second frequency range.
3. The method of claim 1, wherein the first frequency the range is based, at least in
25 part, on a detecting method of the first dwell.
4. The method of claim 1, wherein the first dwell has a smaller bandwidth than a plurality of other dwells in a scan strategy.
- 30 5. The method of claim 2, wherein the first dwell is included in a scan strategy and the acts a)-e) are performed after the scan strategy has been created.

6. The method of claim 1, wherein the first dwell includes a block of contiguous dwells.
7. The method of claim 4, further comprising an act of:
 - f) executing the scan strategy in a receiver system.
8. A computer-readable medium having computer instructions encoded thereon which when executed perform a method of detecting an emitter signal using a receiver having a tuning step size, the method comprising acts of:
 - 10 a) creating a first dwell to detect a set of emitters, the first dwell being defined, in part, by a first frequency range having a first minimum frequency and a first maximum frequency;
 - b) determining if the first minimum frequency of the first dwell is an integer multiple of the tuning step size;
 - 15 c) if the first minimum frequency of the first dwell is not an integer multiple of the tuning step size, shifting the first frequency range of the first dwell to generate a second frequency range having a second minimum frequency and a second maximum frequency, such that the second minimum frequency of the first dwell is an integer multiple of the tuning step size; and
 - 20 d) determining if a portion of a third frequency range of an emitter of the set of emitters that is covered by the first frequency range is not covered by the second frequency range.
9. The computer-readable medium of claim 8, wherein the method further comprises an act of:
 - 25 e) if the portion of the third frequency range is not covered by the second frequency range, creating a second dwell to cover the portion of third frequency range that is not covered by the second frequency range.
- 30 10. The computer-readable medium of claim 8, wherein the first frequency range is based, at least in part, on a detecting method of the first dwell.

11. The computer-readable medium of claim 8, wherein the first dwell has a smaller bandwidth than a plurality of other dwells in a scan strategy.

12. The computer-readable medium of 9, wherein the first dwell is included in a scan
5 strategy and the acts a)-e) are performed after the scan strategy has been created.

13. The computer-readable medium of 8, wherein the first dwell includes a block of contiguous dwells.

10 14. The computer-readable medium of claim 11, wherein the method further comprises an act of:

f) executing the scan strategy in a receiver system.

15 15. A receiver system for detecting an emitter signal using at least one dwell, wherein a dwell indicates a frequency range, an amount of time a receiver is tuned to the frequency range, how often the receiver revisits the frequency range, and a receiver detecting method, the receiver system comprising:

a memory having stored therein a scan strategy, the scan strategy being created by a system that executes acts of:

20 a) creating a first dwell to detect a set of emitters, the first dwell being defined, in part, by a first frequency range having a first minimum frequency and a first maximum frequency;

b) determining if the first minimum frequency of the first dwell is an integer multiple of the tuning step size;

25 c) if the first minimum frequency of the first dwell is not an integer multiple of the tuning step size, shifting the first frequency range of the first dwell to generate a second frequency range having a second minimum frequency and a second maximum frequency, such that the second minimum frequency of the first dwell is an integer multiple of the tuning step size; and

30 d) determining if a portion of a third frequency range of an emitter of the set of emitters that is covered by the first frequency range is not covered by the second frequency range.

16. The receiver system of claim 15, wherein the system further executes an act of:
e) if the portion of the third frequency range is not covered by the second
frequency range, creating a second dwell to cover the portion of third frequency range that
5 is not covered by the second frequency range.
17. The receiver system of claim 15, wherein the first frequency the range is based, at
least in part, on a detecting method of the first dwell.
- 10 18. The receiver system of claim 15, wherein the first dwell has a smaller bandwidth
than a plurality of other dwells in the scan strategy.
19. The receiver system of claim 15, wherein the first dwell includes a block of
contiguous dwells.